

Abstract Poster

Tuesday 28th May

Section **Natural Bioactive Compounds, Functional and Traditional Food Products**

THE USE OF FLAX SEEDS IN HEALTHY PRODUCTS TECHNOLOGIES

Natalia Stetsenko¹, Svitlana Krayevska¹

¹ National University of Food Technologies
68 Volodymyrska St., Kyiv-01601, Ukraine
n.st71@mail.ru

The use of biologically valuable plant materials is one of the ways of increasing the bakery products nutritional value. A rich source of biologically active substances are flax seeds. Their medicinal properties have been known for centuries and are recognized as official medicine. Flax seeds are characterized by the presence of functional food substances, such as proteins with a complete amino acid composition, essential fatty acid with predominant linolenic (ω -3) acids, dietary fiber. Currently, flax seeds are mainly used as raw material to produce linseed oil. At the same time, the number and quality of flax seeds proteins shows their promising use as a protein source to increase the biological value of bakery and confectionery products.

However, the protein products of flax seed in Ukraine are not produced. It was found that 100 grams of flax seeds provide more than 20% of daily energy needs of people, almost 30% of protein needs, more than 50% - needs in fats, phosphorus. The magnesium content of 100 g of flax seeds completely the daily requirement of this element.

By successive protein extraction from flax seeds it was found that predominant proteins are albumins which are extracted by water. Their content was 43.6% of the total protein content. Salt-soluble fraction (globulins) was 21.4%, alkali-soluble (glutelins) - 13.7%.

Flax seeds can be used as whole, as well as to receive flour and protein products - components to develop food products with a guaranteed content of functional ingredients such as proteins, essential ω -3 and ω -6 fatty acids.

KEY WORDS: flax seeds, healthy products, functional ingredient.